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ABSTRACT

A survey of Wisconsin farmers in four market areas was made to determine their market information requirements, their surveillance of media market reports, and their understanding and use of market news received from the Wisconsin broadcast media. The survey was conducted as a follow-on to a study of the timing, frequency, and completeness of market news broadcast by Wisconsin radio and television stations. Specific objectives of the study were to document farmers' listening and viewing habits with regard to broadcast market news reports, to determine the kinds of market information farmers want from broadcast market reports, to rate the importance of mass media and personal sources of market information in making marketing decisions, to determine the usefulness of broadcast information in making various kinds of marketing and production decisions, and to measure farmers' understanding and knowledge of terms used in broadcast market news reports. The study data were obtained by personal interviews with 475 farmers. The findings of the study show that Wisconsin farmers have ready access to broadcast market price reports and other sources of market news information. The farmers cited radio as their single most valuable source of market news. The study found widespread misunderstanding of the USDA terms used in broadcast market reports. (DB)

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research report

Wisconsin Farmers' Use and Understanding of Broadcast Market News

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Research Division
College of Agricultural and Life Sciences
University of Wisconsin-Madison

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Summary

Data for this report were obtained by personal interview of 475 farmers in four separate and distinct marketing areas of the state. Findings show that Wisconsin farmers have ready access to broadcast market price reports and other sources of market news information. Virtually all have one radio in the home, while almost 70 percent have more than one. Over one-half have radios in farm buildings, 90 percent in cars, 30 percent in trucks, and 14 percent in tractors and other farm machinery. Almost everyone has an operating television set.

Favored listening times for radio market reports are the morning period before 9:00 a.m. (56 percent) and the noon hour (39 percent). Television market reports viewing is restricted to the noon hour when virtually all farm programs are carried. However, farmers felt they received the most useful broadcast market reports for making both livestock and grain marketing decisions during the noon hour.

Television market reports are not considered as important as radio as a source of market information. While over 60 percent listened nearly every day to radio market reports, less than 20 percent watched television reports this frequently. Over 50 percent never watched any television market reports, while only seven percent skipped radio reports.

Farmers need the types of market information that will help them make informed production and marketing decisions. The most often wanted market news was a review of the previous day's market. This was followed, in order of importance, by outlook information on livestock numbers and prices, top weights of livestock in different grades, livestock mid-morning prices at terminal and local markets, ranges of prices being paid, opening livestock prices at terminals, prices of feeder stock, estimated receipts, and cash grain prices at local and terminal markets. Types of market information wanted varies by area and commodity produced. The main livestock producing areas showed a strong preference for top weights and ranges of prices being paid. The cash grain area farmers wanted more information on cash prices, futures and outlook information for grain.

While over 90 percent of the farmers are generally satisfied with the current broadcast market reports, some questioned the reliability and usefulness of the reports. Livestock producers used the reports mainly to determine when to sell, what price to accept, what weights to shoot for, and what price to pay for grain or other feed. Grain producers used the reports mostly to determine when to sell and what price to accept. Significantly few indicated that they used market reports to determine where they finally sold their product. This indicates the importance other factors such as transportation and habit in final choice of market.

The farmers cited radio as their single most valuable source of market news. Livestock producers placed it above telephone as the most useful source in deciding when and where to sell. However, grain producers cited contacts with local elevators as providing this kind of decision-making information. Radio ranked second with grain producers, with newspapers and telephone close behind.

Prices received this year are most instrumental in determining how much livestock and grain farmers plan to produce the following year.

Housing and equipment and government programs are the second most important determinants respectively for livestock and grain producers. Forecasts of next year's production and prices are also important for grain, but not for livestock producers.

In order to effectively use market reports in decision making farmers must understand the terms used in describing market activity and price movements. This study found widespread misunderstanding of the USDA terms used in broadcast market reports. Only slightly more than one-half could choose the right definition for selected livestock terms. Grain futures terms were missed by an even greater proportion.

WISCONSIN FARMERS' USE AND UNDERSTANDING OF BROADCAST NEWS

by
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Claron Burnett

This research was funded by HATCH Project 1462 by the Wisconsin Agricultural Experiment Station as part of a three-year (1967-70) study of the use and understanding of market news by Wisconsin farmers. Kroupa and Burnett are Professors of Agricultural Journalism.

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Introduction

Recent studies have shown that farmers depend heavily on the broadcast media for market information.[1] An Iowa study showed that almost all farmers (96 percent) listened to radio farm market broadcasts, and 43 percent watched television for such news.[2] Favored listening times were the noon hour and early morning hours.

A study by Wallaces Farmer showed that a majority (58 percent) of farmers polled felt that farmers benefited from regular reporting of market prices.[3] However, 22 percent thought farmers would be better off without market reports. In a similar Wisconsin study, 73 percent thought farmers benefited from daily livestock and grain market reports.[4] But only about one-third (31 percent) of the farmers interviewed said USDA outlook reports helped them.

Objectives of the Study

This bulletin covers a survey of Wisconsin farmers in four market areas to determine their market information requirements, their surveillance of media market reports, and their understanding and use of market news received from the Wisconsin broadcast media. This survey was conducted as a follow on to a study of the timing, frequency and completeness of market news broadcast by Wisconsin radio and television stations.[5]

Specific objectives of this study were to:

1. Document farmers' listening and viewing habits with regard to broadcast market news reports.
2. Determine the kinds of market information farmers want from broadcast market reports.

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[1]National Association of Farm Broadcasters, The First Medium--Farm Radio, 1967.

[2]Joe M. Bohlen and George M. Beal, Dissemination of Farm Market News and Its Importance in Decision-Making, Research Bulletin 533, Iowa State University, Ames. July 1967.

[3]Donald R. Murphy, "What Farmers Think of Market Reports," Wallaces Farmer, January 13, 1968.

[4]Wisconsin Agriculturalist, "Farmers Like Daily Market Price Reports," February 10, 1968.

[5]Eugene A. Kroupa, Claron Burnett and Larry Meiller, Agricultural Market News Programming of Wisconsin Radio and Television Stations, Research Report R2472, Wisconsin Agricultural Experiment Station, Madison, December 1972.

3. Rate the importance of mass media and personal sources of market information in making marketing decisions.
4. Determine the usefulness of broadcast market information in making various kinds of marketing and production decisions.
5. Measure farmers' understanding and knowledge of terms used in broadcast market news reports.

Method

The personal interview method was used to block survey 475 farmers in four market areas of the state. The locations of the four survey areas are shown in Figure 1. Farmers in contiguous parts of Iowa and Grant counties were interviewed November 8-9, 1968. This area was selected because of the concentration of hog and beef cattle production and the variety of livestock markets available to the farmers. Dealers were located at nearby Dodgeville, Livingston, Mineral Point and Montfort; an auction barn was located at Fenimore; a packer buyer at Cobb; a Farm Bureau buying station at Dodgeville; and packers in Madison and Dubuque, Iowa. All these markets were within approximately 50 miles of the survey area while most of them were within a 15 mile radius.

Survey Area 2 was located in Rock County just east of Janesville. This area was chosen because of the heavy concentration of cash grain producers and its nearness to the Chicago grain market. Rock County has ranked first in soybean and second in corn for grain production in the state for the last several years. Farmers in this area were interviewed December 13-14.

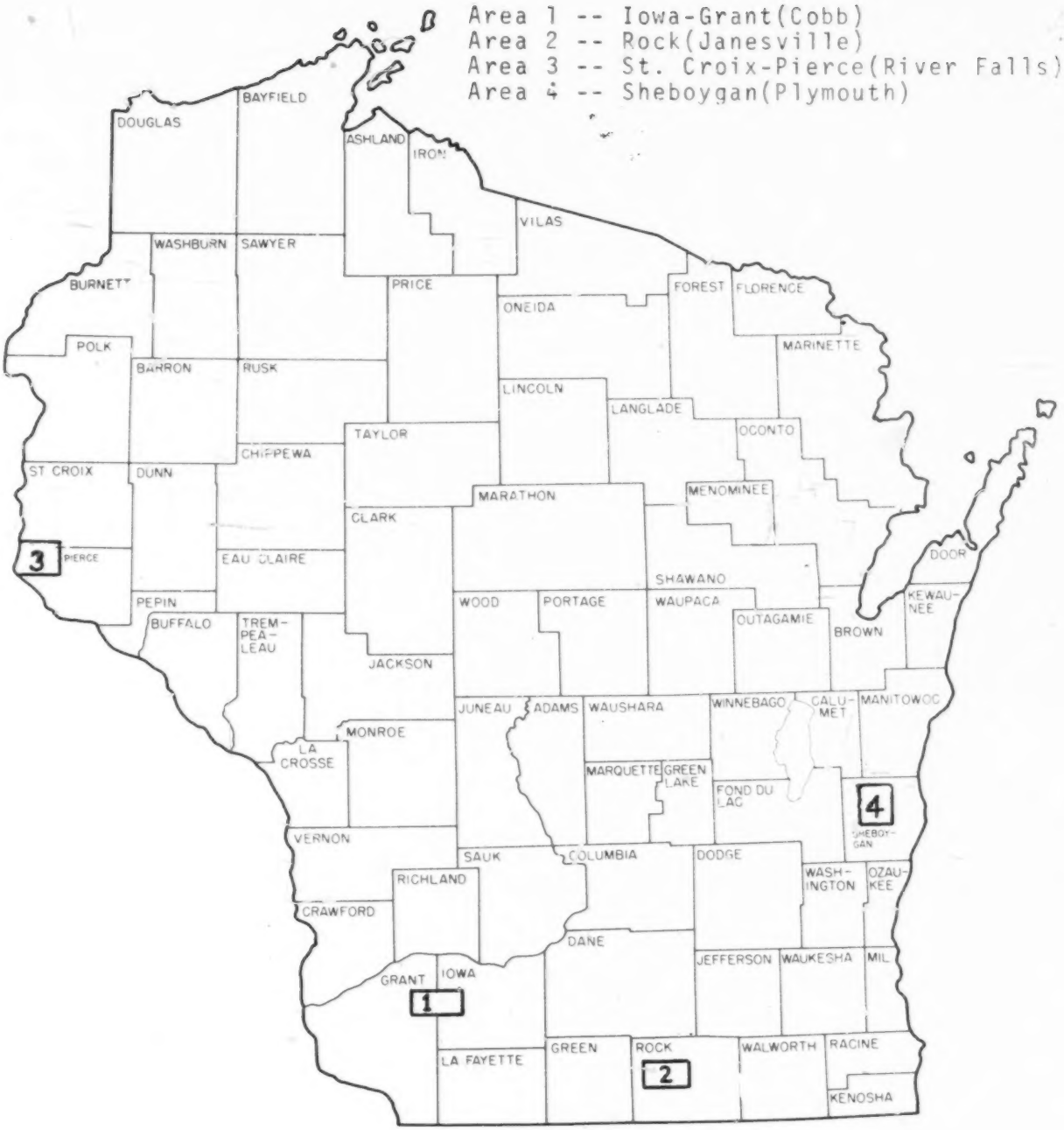
The third survey area consisted of parts of St. Croix and Pierce counties bordering the Minneapolis-St. Paul area of Minnesota. This area was selected for its mixed concentration of beef cattle and dairy production and for its nearness to a terminal market. The St. Paul terminal market handles a large percentage of the cull dairy cattle and veal calves produced in western Wisconsin. In addition, Interstate 94 makes transportation to the market quite easy for sample area residents. Farmers in this area were interviewed January 26-28, 1969.

The fourth sample area was located in Sheboygan County, just south of Plymouth, and extending either side of Highway 57 south to Adell. This is an area of high dairy production located about midway between the packing center of Green Bay and the Milwaukee Terminal market. These two markets handle most of the cull dairy cows and veal calves in the eastern part of the state. Interviews were conducted January 30 to February 1 in this area.

Sources of Income

Although dairying was the main source of income for all areas, other important sources varied according to the basis on which the areas were selected. Income variations by area

Figure 1



Location of Areas Used in Survey of 475 Wisconsin Farmers

and enterprise are shown in Table 1. Combining data for the four areas, income from milk and the sale of calves and cull cows accounted for more than one-half of gross income. Hogs, beef and corn followed in that order as significant sources of income. Off-farm work accounted for an average of five percent of gross income.

Farm Size and Ownership

Most of the respondents farmed 150 to 250 acres, although many did not own all of the land they farmed. Acres farmed averaged 287 in Area 1, 292 in Area 2, 303 in Area 3 and 164 in Area 4. Combining data for all areas, farms averaged 262 acres.

Fifty-six percent of the farmers interviewed did not rent any farm land, but 27 percent did on a cash basis. Another 5 percent used a combination lease of part cash and a share of crops or livestock or both, 8 percent used a crop-share, 3 percent a livestock share, and 2 percent other kinds of lease arrangements.

Off-farm Work

Almost 20 percent of all respondents indicated some work time off the farm for pay during the preceding year. The average number of days worked off-farm was about 39 days. This work was predominantly non-agricultural.

Gross Farm Income

More than one-half (58 percent) had a gross farm income for the 1967 tax year of between $10,000 and $39,999. Thirty percent earned between $10,000 and $19,999 gross income. The Sheboygan dairy area had the highest proportion of low income earners, consistent with smaller farms and more off-farm work.

Age

Over 60 percent were 45 or older, while less than 20 percent were under 35. The 45 to 54 age bracket contained one-third of all the respondents.

Education

Better than one-half (56 percent) of all the respondents attended high school and 18 percent had some college education. Another one-fourth had only an elementary school education.

Exposure to Print Media

Although the main purpose of this study was to document farmers' exposure to and use of broadcast market news, data were also gathered on the numbers of newspapers, magazines, and printed market reports received. These printed sources of market news supplement information received from the broadcast

Table 1

Percentage of Gross Income Derived from Farm and Non-farm Sources for 1967 Tax Year

Source	Area 1 (N=116)	Area 2 (N=113)	Area 3 (N=108)	Area 4 (N=132)	Combined (N=475)
Milk	47.3%	32.9%	46.6%	59.0%	47.0%
Cull dairy	4.5	2.1	5.1	5.5	4.4
Vealers	2.7	1.2	2.0	2.8	2.2
Dairy breed, replacements	1.8	0.7	1.2	1.3	1.3
Market hogs	21.4	12.3	7.5	2.5	10.6
Feeder pigs	1.9	1.1	0.6	2.4	1.6
Breeder hogs	0.5	0.2	0.4	0.5	0.4
Market beef	9.3	7.2	14.9	2.1	8.0
Feeder beef	3.4	3.5	2.8	0.5	2.5
Breeder beef	-	0.5	0.9	0.2	0.4
Lambs, stock sheep	0.5	0.6	0.6	0.6	0.6
Eggs, poultry	1.0	1.7	1.2	0.4	1.0
Corn	2.9	22.2	3.8	1.7	7.5
Soybeans	-	3.0	1.9	0.6	1.3
Small grains	0.2	2.1	0.9	1.6	1.2
Seed grain	0.2	1.1	0.7	0.7	0.7
Tobacco	-	-	-	-	-
Off farm work	2.0	4.7	5.7	9.0	5.5
Other	0.4	2.9	3.2	6.0	3.8
Total	100.0	100.0	100.0	100.0	100.0

media. Particularly important are long range outlook production estimates and price forecasts.

Newspapers

Eighty-six percent of the farmers in this study received one or more daily newspapers. Ninety-five percent of the farmers living in the populous Rock and Sheboygan areas received a daily newspaper. Only 75 percent of the farmers in the St. Croix-Pierce and Iowa-Grant survey areas received a daily paper.

Weekly newspapers were received by 70 percent of the farmers. While these newspapers are not useful for daily monitoring of market news, they do carry outlook estimates of production and local market summaries.

Farm Magazines

Virtually all farmers received at least one farm magazine, while about one-third received five or more farm magazines. Farmers in the Sheboygan dairying area took fewer magazines than those living in the other areas.

Printed Government Market Reports

Printed federal and state government market reports include mainly livestock and crop production forecasts and price summaries. Only one-third of all the farmers received any reports of this form. However, 41 percent of farmers in the Rock County grain producing area received these reports.

Other Printed Market Reports

Special market reports and outlook forecasts are provided by banks, farm management firms, and similar sources. Less than one-fourth (23 percent) received even one such report, although 32 percent of the farmers in grain producing Area 2 received one or more such reports.

Farmers' Exposure to Broadcast Market Information

Farmers are seldom far from a radio. Table 2 shows that virtually all homes had at least one radio in operating condition, while 70 percent had more than one radio. More than one-half the respondents had at least one radio in the barn or other farm building.

Approximately 90 percent had car radios. Thirty percent had a radio in their trucks, and 14 percent had one on their tractor or other farm machinery.

Almost all (97 percent) of the respondents had at least one television set in working condition, and over 20 percent had two sets.

Table 2

Number of Radio Sets Owned by Respondents

Number of sets	Home (N=475)	Buildings (N=475)	Cars (N=475)	Trucks (N=475)	Tractors (N=475)
0	1.5%	44.6%	10.5%	69.9%	85.9%
1	30.1	49.9	65.1	26.3	11.4
2	29.7	4.2	19.2	3.0	1.3
3	21.1	1.3	4.2	0.4	0.8
4 or more	17.6	0.0	1.0	0.4	0.6
Total	100.0	100.0	100.0	100.0	100.0

Exposure to Broadcast Market News Reports

Ninety-four percent of the farmers listened to radio market news reports, and over 60 percent listened nearly every day. As Table 3 shows, there was very little variation in farmers' attention to radio market news reports among the different survey areas.

Farmers' attention to the television market news reports is much lower than for radio reports, as indicated by Table 4. Slightly more than 50 percent of the farmers did not watch any television market reports.

Table 3

Radio Market News Listening Habits

Frequency of Listening	Area 1 (N=116)	Area 2 (N=115)	Area 3 (N=107)	Area 4 (N=133)	Combined (N=471)
Don't listen	7%	7%	2%	9%	6%
Nearly everyday	62	63	66	61	63
2 or more times per week but not daily	19	17	13	16	16
Once a week	7	4	9	11	8
2 or 3 times a month	1	7	5	2	4
Once a month or less	4	4	5	1	3
Total	100	100	100	100	100

Part of this low viewership may be due to the farmers not being in the house during those periods when television market reports are carried, especially the early morning hours. Areas 3 and 4, which are primarily dairy production areas, show extremely low viewership. Areas 1 and 2 where livestock and grain production predominate have higher viewership. This finding suggests that television stations in Areas 3 and 4 should broadcast their market news reports during the noon hour.

Times Farmers Listen to Radio Market Reports

Wisconsin farmers most often listen to radio market reports during the early morning period before 9:00 a.m. Table 5 shows that 56 percent most often listened before 9:00 a.m. and 39 percent during the noon hour. All other periods, including late morning and afternoon hours, found only 5 percent listening.

There are some differences in listening times among the four survey areas. The hog and beef producing farmers in Areas 1 and 3 generally did not listen before 6:00 a.m., as did the grain and dairy farmers of Areas 2 and 4. Farmers preferred to listen at the times that market news is currently aired.

Table 4

Television Market News Viewing Habits

Frequency of Viewing	Area 1 (N=116)	Area 2 (N=115)	Area 3 (N=106)	Area 4 (N=135)	Combined (N=472)
Don't watch	28%	25%	87%	64%	51%
Nearly everyday	28	31	4	13	19
2 or 3 times per week but not daily	22	17	3	9	13
Once a week	8	9	4	8	7
2 or 3 times a month	7	8	1	3	5
Once a month or less	7	10	2	4	6
Total	100	100	100	100	100

Table 5

Time Periods Farmers Most Often Listen to Radio Market News Reports

Time Period	Area 1 (N=103)	Area 2 (N=99)	Area 3 (N=105)	Area 4 (N=122)	Combined (N=429)
Before 6:00 a.m.	6%	18%	6%	18%	12%
6:00 - 8:59 a.m.	56	38	49	34	44
9:00 - 11:59 a.m.	11	3	1	3	4
12:00 - 1:29 p.m.	27	39	45	45	39
1:30 - 6:30 p.m.	0	1	0	0	1
Total	100	100	100	100	100

Times Farmers Watch Television Market Reports

Viewing of television market news reports is almost entirely limited to the noon period. Virtually all television agricultural market news programming is broadcast during the noon hour, thus farmers have little choice.

Table 6

Time Periods Farmers Most Often Watch Television Market News Reports

Time Period	Area 1 (N=80)	Area 2 (N=77)	Area 3 (N=12)	Area 4 (N=45)	Combined (N=214)
Before 6:00 a.m.	0%	0%	0%	4%	1%
6:00 - 8:59 a.m.	0	0	33	4	3
9:00 - 11:59 a.m.	0	0	0	2	0
12:00 - 1:29 p.m.	100	96	67	87	94
1:30 - 6:30 p.m.	0	4	0	2	2
Total	100	100	100	100	100

Times When Farmers Receive Most Useful Market News

Statewide, livestock farmers slightly favored the noon hour over the morning hours for times when they receive the most useful broadcast market reports. However, farmers in the primarily hog and beef counties of Area 1 strongly preferred the morning reports. Farmers in the grain producing Area 2 clearly preferred the noon reports. Grain producers overwhelmingly considered the noon reports as most useful.

On the basis of findings, radio and television stations should give their most complete livestock reports during the morning hours. Grain reports should be concentrated during the noon hour when the most complete cash and futures prices information is available from Chicago.

Seasonal Changes in Listening Habits

While 65 percent reported listening about the same during all seasons, 20 percent listened most during winter (December-February), 3 percent in fall (September-November), 4 percent in spring (March-May) and 2 percent in summer.

Hog and beef producers in Area 1 reported listening most during the fall when they have livestock to market. Grain producers in Area 2 listened most during the winter (20 percent)

and fall (13 percent), reflecting the importance of grain marketings at these times.

One-half those indicating that they listened more during any one season reported that they had something to sell during this period. Another 36 percent reported having more time to listen, which explains increased listening during the winter.

Types of Market Information Desired

Farmers need the types of market information that will help them make informed production and marketing decisions. The belief that farmers use early morning reports as a barometer of what the day's market prices will be is supported by the large proportion of farmers wanting a "review of previous day's market" (See Table 7). On the other hand, farmers are accustomed to getting such a review from the early morning reports. At this time local prices have not been established and these farmers do not have available any current day's prices.

The second most often wanted item was outlook information on livestock numbers and prices. Forty-five percent of Wisconsin's radio and television stations reporting market news carry outlook information. However, only slightly more than one-third of the AM radio stations report outlook information.

Other key types of information wanted include top weights of livestock in different grades, livestock mid-morning prices at terminals and local markets, ranges of prices being paid, opening livestock prices at terminals, prices of feeder stock, estimated receipts, and cash grain prices at local and terminal markets.

As Table 7 shows, the types of information needed varies by area and commodity produced. The main livestock producing areas (1 and 3) showed a strong preference for top weights and ranges of prices being paid. The cash grain Area 2 farmers wanted more information on cash prices, futures and outlook information for grain.

Radio and television market reports should emphasize market information particularly relevant to the types of agricultural commodities produced in their areas. More attention should be given to outlook information and mid-morning local prices.

Sources of Information During Different Daytime Periods

Farmers in this study were asked to indicate their main source of market information during different time periods. Farmers could list any mass medium or personal source.

Radio was the main source of both livestock and grain market information during all periods of the day.

However, the size of the total audience seeking information

Table 7

Types of Market Information Farmers Want From Radio and Television Reports

Information Type	Area 1 (N=116)	Area 2 (N=115)	Area 3 (N=108)	Area 4 (N=136)	Combined (N=475)
1. Review of previous day market	62.9%	45.2%	57.6%	50.7%	56.2%
2. Outlook on livestock numbers & prices	47.4	45.2	45.4	26.5	40.4
3. Top weights of livestock of different grades	50.9	34.8	41.7	27.2	38.1
4. Fat livestock mid-morning prices at terminal & local mkts.	38.8	36.5	37.0	33.1	36.2
5. Range of prices being sold	38.8	39.1	45.4	19.9	34.9
6. Fat livestock opening at terminals	32.8	36.5	32.4	30.1	32.8
7. Prices of feeder stock at terminal & local	27.6	26.1	45.4	23.5	30.1
8. Estimated receipts	40.5	29.6	36.1	16.2	29.9
9. Fat livestock closing prices at terminal and local markets	27.6	30.4	24.1	29.4	28.0
10. Cash grain prices at local elevators	14.7	53.0	32.4	11.0	26.9
11. Cash grain at Chicago	15.5	47.8	20.4	10.3	22.9
12. Butter & cheese at Chicago & Green Bay	35.3	12.2	12.0	15.4	18.7
13. Outlook information on grain	8.6	39.1	20.4	5.9	17.9
14. Dressed meat prices	24.1	18.3	17.6	8.1	16.6
15. Live cattle futures	19.0	27.8	13.9	5.1	16.0
16. Grain futures	8.6	33.0	12.0	4.4	14.1
17. Stock market	12.9	17.4	13.9	10.3	13.5
17. Dow-Jones averages	9.5	16.5	19.4	9.6	13.5
18. Egg prices	15.5	12.2	11.1	6.6	11.2
19. Soybean meal and oil futures	8.6	14.8	15.7	1.5	9.7
20. Pork belly futures	10.3	12.2	6.5	3.7	8.0
21. Volume of trading in futures	6.9	13.9	10.2	1.5	7.8
22. Egg futures	4.3	5.2	3.7	6.6	5.0
23. Live & dressed poultry at Chicago or local	3.4	2.6	2.8	5.9	3.8
24. Outlook on vegetables and fruit	1.0	2.6	5.6	2.2	2.7
25. Cash prices for vegtables and fruit	0.0	1.0	1.9	1.5	1.1
26. Cash prices for tobacco	1.0	1.7	0.0	1.0	1.0

varied by time periods. In addition, radio's importance relative to other sources varied for different commodities over the different periods.

Livestock producers seek market information mainly in the early morning and noon hours. Radio commands most of the audience before 10:00 a.m. when there are almost no television market reports. During the midmorning hours of 10:00-11:59 a.m. when there are few radio reports, the telephone and other sources become important. Television grabs almost one-third of the noon time audience. Other sources such as the newspaper become more important after 1:30 p.m.

The situation for grain farmers was somewhat similar. However, television becomes almost as important as radio during the noon hour when most TV reports are aired. Therefore, television stations in grain producing areas should feature complete cash grain and futures prices during noon market reports.

Most Important Source of Market Information

Farmers considered radio their most important source of market information, the one they would like to keep if they had to give up all others. The pervasive nature of radio and the timeliness, completeness and usefulness of its market news reports undoubtedly influenced this choice.

Table 8

Farmers' Most Important Media Source of Market Information

Source	Area 1 (N=101)	Area 2 (N=109)	Area 3 (N=101)	Area 4 (N=130)	Combined (N=441)
Radio	50%	41%	77%	65%	58%
Television	15	26	1	6	12
Newspapers	4	12	13	21	13
Magazines	2	3	5	1	3
Telephone	22	9	0	0	7
Others	8	9	5	8	7
Total	100	100	100	100	100

There were some differences in strength of preference for radio among the areas, as shown in Table 8. The livestock producers in Area 1 show a strong regard for telephone which allows them to check local market prices. Area 2 grain farmers apparently place a high value on their noon time television cash grain and futures reports. Greatest preference for radio is shown by Area 3 farmers, while dairy farmers in Area 4 look to newspapers, probably for cheese, butter, and milk prices not usually carried on radio or TV. Choice of medium apparently depends upon farmers' specific information needs. Farmers' opt for the medium that suits their needs best.

Farmers' Opinions of Broadcast Market Information

Radio and television market news reports received a favorable rating from over 90 percent of the farmers interviewed. Ninety-four percent felt that the reports were understandable, and the latest information available. However, farmers did express a slightly less favorable opinion of the reliability and usefulness of the reports. Use of telephone to obtain market information not otherwise available was highest in Areas 1 and 2, which gave the lowest ratings for usefulness of broadcast market information.

Farmers' Use of Market News in Marketing Decisions

Many farmers apparently sell their livestock and grain by habit rather than careful choice of market based on timely price information. One purpose of this study was to determine whether broadcast market information helped farmers decide when and where to sell and what price to accept for their commodities.

Reliance on habit in making marketing decisions may explain the high percentage who did not use broadcast market information in determining where to sell. On the other hand, it might indicate that broadcast market information was of limited usefulness in making certain kinds of decisions at the local level.

Farmers were asked to indicate their top sources of farm income and to check those kinds of decisions where broadcast market information was useful. The responses were then categorized according to whether the reports were helpful in making livestock only, grain only, or both livestock and grain marketing decisions, as shown in Table 9.

Broadcast market reports were used by livestock producers for deciding when to sell, what price to accept, market weights to shoot for, developing personal knowledge of markets, and for discussing markets with friends. However, non-price factors seem to be important determinants of where farmers ultimately sell their livestock.

A similar situation exists for making grain marketing decisions. Farmers monitor the broadcast market reports to help decide when to sell and what price to accept. However, determination of actual market is usually not influenced by the market reports. This may be explained by the fact that broadcast market reports generally give the Chicago cash and futures markets. Local grain prices are rarely aired by local radio and television stations.

Earlier data showed that farmers considered radio their main source of livestock and grain market information during most periods of the day. However, the main source of market information does not seem to be the most helpful for decisions about where to sell livestock and grain.

Relative Importance of Information Sources

Farmers were asked to rate the different sources of market information on a scale with "1" indicating "not important" and "5" indicating "very important". The middle of the scale, or "3", was considered neutral. Ratings were constructed on the basis of helping decide when and where to sell livestock and grain.

Sources of market news were divided into mass media and personal sources. Some overlapping occurs because personal sources supply the mass media with market price information. The mass media sources for this study consisted of radio,

television, newspapers, magazines and state and federal printed market reports. Personal sources differed, depending upon whether livestock or grain information was being considered.

Table 9

Types of Decisions Aided by Broadcast Market News

Decision	Percent Mentioning			
	Total Times Mentioned	Livestock Only	Grain Only	Both L&G
1. When to sell	292	76.7%	11.3%	12.0%
2. What price to accept	252	70.6	12.3	17.1
3. Develop personal knowledge of markets	224	70.5	11.2	18.3
4. Be able to discuss current markets with friends	221	71.0	10.0	19.0
5. Market weights to shoot for	169	100.0	-	-
6. What price to pay for grain & other feed	135	100.0	-	-
7. How much to sell at one time	120	69.2	15.8	15.0
8. Where to sell	119	80.7	10.1	9.2
9. Length of feeding time for livestock	88	100.0	-	-
10. To increase prod. next year	87	66.7	17.2	16.1
11. To spend or borrow money for buildings, land, new machinery, etc.	86	65.5	11.5	21.8
12. To continue prod. at the same rate	85	63.5	17.6	18.8
13. To cut down or stop production	70	60.0	22.9	17.1
14. Types of feeder or breed stock to buy	50	100.0	-	-

Farmers were not forced to give an opinion of any source if they felt they held none. Those not selling grain were excused from completing the section dealing with sources of grain marketing information.

The number of responses in each source category was multiplied by the appropriate scale values, (1-5). These were summed and divided by the total number of responses to obtain an average rating score for that source.

Livestock producers rated radio as their most helpful source of market information in deciding when and where to sell, with the telephone rated second. This finding again emphasizes the role of telephone in supplying information during periods when no radio market broadcasts are available. While radio is often used for market surveillance purposes, the final decision as to when and where to sell may be based on telephone information that is more timely and localized than any information given by radio.

Grain producers considered grain elevators their most useful source of information. Radio was the second choice, with telephone a close third.

Several factors explain the high rating achieved by grain elevators. First, many radio and television stations do not carry complete grain price reports, if they carry them at all. Second, there are generally numerous grain elevators easily accessible to the farmers in any one area. Since a medium cannot give price information for all of them, farmers rely on personal contact or the telephone. The mass media again serves a surveillance function, while personal contact most often influences the final marketing decision.

Use of Telephone to Get Market Information

Fifty-six percent of the respondents used the telephone to get livestock market information not reported by radio and television. However, there was wide variation among the survey areas indicating that use of the telephone is a function of the kind of agricultural production. Ninety-three percent of the hog and beef producers in Area 1 used the telephone, while the vast majority of dairy farmers in Areas 3 and 4 never or seldom used it. The grain producing Area 2 fell in between because there was a fair amount of livestock produced.

Grain producers generally made greater use of the telephone to obtain market information not broadcast on radio and television. Only 20 percent of the grain producers never used telephones to get price information. Greatest use of the telephone was made by Area 2 grain producers while least use was made by Area 4 farmers. Again, usage of the telephone seemed to be a function of the kind of commodity produced and the number of sales.

Farmers' use of the telephone to get market information not provided by the mass media raises the question of whom do farmers most often talk with before marketing livestock or grain? Livestock and grain producers were asked to name up to three sources they most often talked with.

Trucker, family and dealer were the three sources respectively cited by 64, 55, and 36 percent of all livestock producers. Packers and neighbors were cited by 20 percent each. This finding was not too surprising because a large proportion of farmers do not haul their own livestock. Also,

many truckers are also licensed dealers which allows the farmers to sell and move their livestock off-farm in one operation.

Grain producers most often talked with the local elevator manager (cited by 85 percent of 123 grain producers) before marketing grain. Other top sources such as neighbors (40%), family (39%), grain broker (29%), and trucker (21%) were not nearly as important.

Truckers were not as influential with grain growers as they were with livestock producers. Generally most grain producers hauled their own grain, and the trucker did not function as an alternative market as he did for livestock.

There is clearly a relationship between farmers' market information gathering process and their marketing behavior. Non-price factors related to transportation, number of sales, and type of agricultural commodity produced influenced information gathering and marketing behavior.

Transportation Sources Used

The ability to respond to market price information is greatly influenced by a farmer's capability to get livestock and grain to market. If the response time is appreciably increased by transportation restrictions, then the value of broadcast market information is greatly diminished.

Only 20 percent of the livestock producers in this study hauled their own livestock to market. Virtually all (97 percent) of the mainly dairy farmers in Area 4 hired trucking, but more than one-third of the primarily hog and beef producing farmers in Area 1 hauled their own.

Grain producers provided most of their own transportation when selling grain. Sixty-four percent hauled their own, while 12 percent hired a trucker, and 14 percent relied on trucking provided by the local elevator.

Number of Sales During the Year

The importance of market price information is also related to the number of sales or marketing decision that farmers make during the year.

Livestock producers made more selling or marketing decisions than did grain producers. More than one-half (51 percent) sold livestock 11 or more times during the year, 27 percent 6 to 10, 14 percent 3 to 5, and 8 percent 1 to 2 times.

Most grain producers made less than five selling decisions during the year. While 63 percent made less than five sales, 20 percent made 5 to 10, and 17 percent made more than 10 sales annually.

Number of Different Markets or Buyers

An habitual marketing behavior gains further support from the finding that 60 percent of livestock producers sell to only one or two markets. This tendency was much stronger in the predominantly dairying Areas 3 and 4, where 42 and 46 percent respectively sold to a single market. The hog and beef producers in Area 1 were more inclined to sell to several markets, with only 15 percent selling to a single market. A larger number of alternative market outlets and farmers supplying their own transportation probably explained this difference.

Sixty-five percent of the grain producers also sold to only one or two markets. Over 70 percent of the farmers in the predominantly grain producing Area 2 sold to one or two buyers. Although very few farmers sold grain in the livestock producing survey areas, they showed a great number of buyers, because they sold grain to other farmers for feed.

Location of Markets

Where farmers sell largely determines the markets from which they should receive price information. Broadcast media may not be serving their local farm audience with the price information it needs if the wrong markets are reported. Livestock producers in the four survey areas had a choice of several local auctions, packer buyers, trucker-dealers, cooperatives, packers and terminals. Local markets were defined as being markets other than terminals or packers. For the areas surveyed the terminal market and large packers were at least 50 miles distant, with the exception of Area 3 near the St. Paul terminal market.

Sixty-one percent sold livestock to distant markets, except in Area 1 where 67 percent sold locally. Area 1 had the largest concentration of local markets and buyers for packers. In addition many Area 1 farmers hauled their own livestock. There are several possible reasons why farmers preferred distant markets. Daily broadcast market price information is readily available from the larger markets. Also farmers believe that prices are set at the terminal and by packers, and that there will be little variation in the broadcast price and what they are likely to receive. However, at the local markets there is a problem of translating the terminal prices into adjusted local prices. There is also the uncertainty involved with selling on an auction basis. Finally, farmers know exactly what the transportation costs, estimated shrinkage, and yardage fees will be when selling at the terminals. Some also choose to sell directly to packers because of price incentives for high quality animals judged on a carcass grade basis.

Thirty-one percent of the livestock producers in this study sometimes sold livestock directly to truckers and dealers. This alternative relieved them of any problems associated with transportation or selection of market. Sixty-percent of those

using this method sold to the same dealer or trucker. One possible reason more farmers did not use this market alternative more often is that many dealers and truckers did not pay farmers until after taking the livestock to market. Almost two-thirds (65 percent) of the farmers did not receive any money until after the dealer or trucker sold the livestock and got his money.

Over 80 percent of the farmers selling cash grain sold to local elevators or feed mills. However, 67 percent of Area 1 farmers usually sold cash grain to neighbors for livestock feed. Although farmers do make substantial use of the telephone for checking grain prices at local elevators, the broadcast media could emphasize the prices being paid at key local elevators in addition to the Chicago prices.

Determinants of Where Commodities Sold

Farmers were asked to select the one thing that most often determined where they sold their livestock. Although there was some variation among areas, current prices were the main determinant, as shown in Table 10. However, their relative importance was clearly related to the number of livestock ready for market, the availability of transportation and the weight and grade of animals to be sold. Transportation exerted less influence on the choice of market in Area 1 where more farmers hauled their own livestock than in Area 4 where 97 percent hired a trucker.

Table 10

Factors Determining Where Farmers Sold Livestock

Factors	Area 1 (N=112)	Area 2 (N=91)	Area 3 (N=99)	Area 4 (N=115)	Combined (N=417)
Number of livestock ready	22%	21%	21%	19%	21%
Weight and grade	20	14	10	9	13
Time of year	2	1	10	3	4
Transportation	2	6	14	42	16
Current prices	43	46	19	14	30
Kind of livestock	4	2	8	5	5
How bad I need money	5	6	2	3	4
Others	2	4	15	5	7
Total	100	100	100	100	100

If current prices are really a valid determinant of market choice, then one would expect farmers to compare prices from different markets before selecting one. Almost two-thirds (65 percent) of the livestock producers in Area 1 compared market prices and expected net returns before selling, as did 46 percent of the livestock producers in Area 2. However only 29 percent in Area 3 and 12 percent in Area 4, both heavy dairying areas, compared prices and net returns from different markets. Combined, only 38 percent of the farmers compared prices before selling.

The prices used for comparison prices mostly (63 percent) came from distant markets, i.e. terminals and packers. Another 20 percent used only local market prices, and 17 percent used a combination of local and distant markets prices for comparison purposes. Sixty-one percent of the farmers had indicated that they sold primarily to packers and terminals.

Although the bulk (62 percent) of the farmers did not compare prices before selling livestock and sold to only one or two markets, three-fourths indicated they would change markets for $25 or less increase in net returns from one sale of livestock. "Sale" was defined as a typical load of livestock the farmers would normally sell.

The only way a farmer could tell if the total returns would be greater would be to compare market prices. This apparent paradox again indicates that farmers' actual marketing behavior and how they believe they would behave are at opposite poles. Either an habitual mode of decision making was operating, or farmers placed relatively greater emphasis on other factors than current prices in the decision making process.

The situation was somewhat different for grain producers. Current prices were relatively more important to grain than livestock producers (60 vs. 30 percent), because grain farmers made fewer sales, usually provided the transportaiton, and sold the bulk of their grain at one time. Two-thirds of the grain producers compared market prices and expected net returns before selling. Only 38 percent of the livestock producers compared prices.

Local prices were much more important for comparison purposes for grain producers. Twenty-eight percent used only local markets, 22 percent used both local and distant, and 51 percent used only distant market prices for comparison purposes. However, it is safe to assume that those who said they used distant prices actually used them in combination with local market prices, because almost all grain was sold locally. Eighty-one percent said they sold mostly to local elevators and feed mills, 12 percent to other farmers and neighbors, with only 7 percent selling to other markets. More than three-fourths (76 percent) claimed they were willing to switch from their usual grain market for a $25 increase in net returns per sale. Fifty-two percent would switch for less than $10, yet 84 percent said they sold to three or less markets, 65 percent

to two or less and 37 percent to only one market. Again farmers' perceptions of their use of market prices in choice of markets does not agree with their actual marketing behavior.

Importance of Outlook Information

Forecasts of prices and production are an aspect of market reporting which might be expected to influence production and marketing decisions. Farmers were asked to name the three most important factors determining how much livestock they would produce next year.

Prices received during the current year were mentioned by the most farmers (48 percent), followed by housing and equipment (41 percent), and roughage for winter (33 percent). Other reasons and frequency of mention were: price of feed grain (28 percent); amount of grain they planned to grow (26 percent); availability of pasture (24 percent); forecast of next year's production and prices (19 percent); hired labor available (16 percent); and all other (4 percent). Many of these factors are inter-related, but it seems clear that outlook information was not nearly as important as current prices in determining next year's livestock production.

Prices received for the current year were mentioned most often by grain producers (87 percent), followed by government program (47 percent) and forecasts of next year's production and prices (32 percent). The relatively great importance assigned to the forecasts by grain producers seems primarily due to correlation with government programs and prices received. This implies that broadcast media should give more attention to reporting outlook information to better serve grain producers.

When asked outright which they thought was more important, current prices or long range outlook information, 52 percent of the livestock producers chose current prices, 21 percent said outlook, and 27 percent thought they were equally important for making marketing decisions. Forty-two percent of the grain producers thought current prices most important, but 28 percent chose outlook information for making marketing decisions.

Although farmers may use outlook information as a gauge of future prices, the certainty of current prices cannot be denied. Farmers might have a higher regard for outlook forecasts if more of them understood and used the futures markets.

Only nine percent of the 475 farmers interviewed had ever used the futures markets for hedging or speculating. Based on such a low level of use, perhaps radio and television stations are justified in not broadcasting futures market information. However, farmers should expect to get key futures price information from the media best suited to keeping it timely even if futures markets are not widely used.

Farmers' Understanding of Market News Terms

Farmers must understand the terms used in broadcast market news reports to effectively use this information in decision making. This study found widespread misunderstanding of standard USDA terms used to describe market activity and price movements. When presented a list of common terms generally used in daily broadcast livestock market reports, many farmers could not choose the correct definition for the terms.

As Table 11 shows, there was wide variation as to the understanding of individual terms. The proportion of correct answers ranged from a low of 15.5 percent for "strong" to a high of 70 percent for "moderate". That "strong" and "weak" were frequently missed was not surprising, because they are two of the more difficult terms to define precisely. They refer to rather subtle states of price movement. "Strong" means a definite leaning toward upward change but not measurable. "Weak" means a definite leaning toward lower change but not measurable. In most cases farmers saw these two terms as meaning a definite measurable upward or downward change. The USDA should consider eliminating "strong" and "weak" from the list of terms currently used.

Table 11

Percent Correctly Identifying Marketing Term Definitions

Livestock Terms		Percent Correct	Grain Terms		Percent Correct
Active	(N=439)	50.1%	Short	(N=204)	15.2%
Slow	(N=438)	64.4	Long	(N=203)	15.8
Higher	(N=439)	57.6	Broker	(N=203)	53.2
Steady to firm	(N=439)	51.9	Futures	(N=202)	48.5
Moderate	(N=438)	70.0	Open Contracts	(N=202)	17.8
Strong	(N=439)	15.5			
Steady	(N=439)	62.2			
Weak	(N=437)	27.0			
Lower	(N=436)	62.6			
Supply	(N=437)	59.3			
Demand	(N=437)	55.6			
Hedge	(N=430)	18.6			

Grain producers fared even worse in defining futures market terms. It was not surprising that farmers scored poorly since so few have ever used the futures markets for hedging or speculating. Only 6 percent of the farmers surveyed had used grain futures in the past five years. Farmers were rather familiar with the common terms "broker" and "futures", but few knew or could guess what "short", "long" and "open contracts" meant.

If the respondents in this study are typical, then most Wisconsin farmers, do not understand the terms used in broadcast market reports. The list of livestock market terms needs to be shortened to eliminate terms of similar perceived meaning. Understanding of futures terms may result from increased farmer use of these markets. However, if farmers are not first introduced to the importance of understanding futures, there is not reason to expect increased usage of the market. The increased growth and use of cut and yield livestock grading and contract buying by packers will further complicate the understanding of livestock market news reporting terms by both farmers and broadcasters.

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